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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/564,867	01/17/2006	Glen D. Austin	6.30.3128 PCT/CA-US	5100

7590 08/20/2009  
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EXAMINER
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STULII, VERA

ART UNIT	PAPER NUMBER
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1794

MAIL DATE	DELIVERY MODE
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08/20/2009

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/564,867	<b>Applicant(s)</b> AUSTIN, GLEN D.	
	<b>Examiner</b> VERA STULII	<b>Art Unit</b> 1794	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on \_\_\_\_ is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. ____.                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>01/17/2006</u> .  | 6) <input type="checkbox"/> Other: ____.                          |

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1 and 2 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The terms "maximum", "lower level", "minimum" in claims 1 and 2 is a relative terms that render the claims indefinite. The terms are not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. It is not clear what is the standard for the amount of foam, how is it quantified, and how one can identify when the minimum or maximum limit is reached.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

**Claims 1 and 8 are rejected under 35 U.S.C. 102(b) as being anticipated by Stippler et al (DE 19828688).**

In regard to claim 1, Stippler et al discloses a method of controlling/regulating fermentation process of the beer wort in the enclosed fermentation vessel (Abstract,

Art Unit: 1794

page 1 of the translation). Stippler et al discloses regulating the fermentation of a fluid within an enclosed vat (3), a camera (31) positioned above the fluid monitors the condition of the fluid surface (6) through an endoscope (30) (Abstract). The optical signals are captured in the visible range, including the infrared range, and are evaluated to regulate fermentation process parameters including pressure and temperature (Abstract). As an integral part of the controlling fermentation method, Stippler et al discloses a method of controlling foam production in fermenting wort by adjusting pressure inside the fermentation vessel (pages 7-8, 14 of the translation). Stippler et al further discloses increasing pressure in order to reduced foaming (page 18 of the translation). Stippler et al further discloses that pressure is released when the foam is reduced to the "tolerable extent" (page 20 of the translation). The value for the "tolerable extent" of the foam is stored in computer memory (page 20 of the translation). Since the values for the increased level of foam are stored in the computer, and the operation of the pressure increase/release is performed automatically based on the optical signals, the additional steps of pressure increase/release are performed if necessary. In regard to claim 8, Stippler et al disclose primary fermentation.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

**Claims 2, 3, 4 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stippler et al (DE 19828688).**

Stippler is taken as cited above. In regard to claims 2, 3, 4 and 5, Stippler is silent as to values of the increased pressure. The particular values of the increased pressure would depend on the individual size of the fermentation vessel, headspace, specific characteristic of wort and initial ingredients used to form the wort. The particular values of the increased pressure are seen to have been an obvious result effective variable based on the above mentioned factors.

**Claims 6 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stippler et al (DE 19828688) in view of the Applicant's admission of the prior art.**

In regard to claims 6 and 7, Stippler et al is silent as to the collecting and recycling of carbon dioxide. Applicants disclose (page 2, para. 1 of the specification) that "[a]s is well known, the recovery of carbon dioxide produced during fermentation followed by purification, compression and liquidation for reuse in various processes in the brewery is now a valuable utility on a par with steam or water. This is especially so

Art Unit: 1794

when fermentation and maturation occurs in a CCV where the carbon dioxide occurs in a concentrated form and can readily be lead away and collected (refer to example to pp. 393-394 of Technology Brewing and Malting). Collection is usually made in the period of maximum evolution following the initial period of venting when all air is being displaced to the final period when fermentation has slowed" (paragraph [0005] of the Specification). Therefore, one of ordinary skill in the art would have been motivated to modify Stippler et al and to collect and recycle carbon dioxide as recited, since this process was well known in the art as admitted by Applicant's and disclosed in Technology Brewing and Malting.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to VERA STULII whose telephone number is (571)272-3221. The examiner can normally be reached on 7:00 am-3:30 pm, Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Keith Hendricks can be reached on (571) 272-1401. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Vera Stulii/

Examiner, Art Unit 1794

/Steve Weinstein/

Primary Examiner, Art Unit 1794

Application/Control Number: 10/564,867  
Art Unit: 1794

Page 6